<u>REMARKS</u>

This application has been carefully reviewed in light of the Office Action dated October 16, 2009. Claims 1, 3 to 5, 7, 8, 10, 13 to 16 and 19 are pending in the application. Claims 1 and 16 are the independent claims. Reconsideration and further examination are respectfully requested.

Claims 1 and 16 were objected to for informalities which have been attended to by amendment as set out above.

Claims 1, 3 to 5, 7, 8, 10, 13 to 16 and 19 were rejected under 35 U.S.C. § 103(a) over U.S. Patent No. 5,911,139 (Jain), U.S. Publication No. 2002/0106135 (Iwane), U.S. Patent No. 6,961,463 (Loui), U.S. Publication No. 2002/0176116 (Rhoads), U.S. Patent No. 7,127,106 (Neil) and U.S. Publication No. 2005/0055344 (Liu).[1] Reconsideration and withdrawal of this rejection are respectfully requested.

Independent Claims 1 and 16 generally concern storing an input image in a database. An original is scanned to generate an input image. First search information associated with the input image is acquired on the basis of information input by a user, and feature data contained in the input image is acquired as second search information. If pointer information is detected from the input image, the original data file is searched for using the pointer information. On the other hand, if the pointer information is not detected from the input image, the original data file is searched for using the first and second search information.

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[1] Page 3 of the Office Action omits Claim 14 from the list of the rejected claims. However, it is believed that this is merely a typographical error, as Claim 14 is addressed in the body of the rejection.

According to one aspect of Claims 1 and 16, the original data file is searched for using the first and second search information in a case that the search using the pointer information fails to find the original data file corresponding to the input image.

By virtue of this feature, it is ordinarily possible to compensate for the situation where the pointer information is not successful in locating the original data file.

According to another aspect of Claims 1 and 16, in a case where the original data file corresponding to the input image is found by the search and the original data file is an image data file, the image data file is converted into outline data and the outline data is stored in the database. The outline data indicates a visual representation of a tracing of the outline of a character or a graphic object.

By virtue of this feature, it is ordinarily possible to store outline data for use in later searching and/or editing, even if the original data file is found by the search.

Referring specifically to claim language, independent Claim 1 is directed to an image processing method executed by an image processing apparatus having a scan function which scans an original document. The method includes (a) scanning the original document to generate an input image. Additionally, the method includes (b) acquiring first search information associated with the input image on the basis of search information input by a user; and (c) acquiring feature data contained in the input image as second search information, and attempting to detect pointer information from the input image indicating a storage location of an original data file in the database. Further, the method includes (d) searching for the original data file corresponding to the input image in the database using the pointer information in a case that the pointer information is detected in step (c), and (e) searching for the original data file using the first and second search information in a case

that the pointer information is not detected in step (c). In addition, the method includes (f) searching for the original data file using the first and second search information, in a case that the search using the pointer information in step (d) fails to find the original data file corresponding to the input image, and (g) converting the input image into outline data and storing the outline data in the database, in a case where the original data file corresponding to the input image is not found in step (d) or (e) or (f). Moreover, the method includes (h) converting the image data file into outline data and storing the outline data in the database in a case where the original data file corresponding to the input image is found in step (d), (e) or (f) and the original data file is an image data file. The outline data indicates a visual representation of a tracing of the outline of a character or a graphic object. The method also includes (i) declining to store the input image data into the database, in a case that the original data file corresponding to the input image is found in step (d), (e) or (f), and the original data file is not an image data file. Also, the method includes (j) registering the search information input by the user in step (b) in an index file regardless of whether the original data file corresponding to the input image is or is not found in step (d), (e) or (f). The index file of registered search information input by the user is used in a next search for the original data file.

Independent Claim 16 is directed to an apparatus substantially in accordance with the method of Claim 1.

The applied art is not seen to disclose or suggest the features of Claims 1 and 16, and in particular is not seen to disclose or suggest at least the features of (i) searching for an original data file using information input by a user and feature data acquired from an input image in a case that a search using pointer information fails to find

an original data file, and (ii) converting the original data file into outline data and storing the outline data in the database, in a case where the original data file corresponding to the input image is found in a search and the original data file is an image data file.

As understood by Applicant, Jain is directed to a system for content-based search and retrieval of visual objects. A visual information retrieval (VIR) engine uses a set of primitives to compare visual objects. A specific set of visual features can be processed and used for content-based similarity scoring. See Jain, Abstract.

Page 4 of the Office Action asserts that Jain (Column 9, lines 52 to 67) discloses searching for an original data file corresponding to an input image by using alpha-numeric queries and feature vector search information.

However, the cited portions of Jain simply disclose that an image comparison module compares a query target feature vector and a feature vector for the image being tested. See Jain, Column 9, lines 52 to 67. The feature vectors, in turn, are generated solely from an input visual image. See Jain, Column 9, lines 41 to 50. Thus, the cited portions of Jain are not seen to disclose or suggest searching for an image file using both feature data acquired from an input image and information input by a user, much less doing so in a case that a search using pointer information fails to find an original data file.

With particular regard to pointer information, page 6 of the Office Action asserts that Rhoads (paragraphs [0024] and [0043]) discloses using pointer information in a case that pointer information is detected.

As understood by Applicant, Rhoads is directed to embedding digital watermarks in documents to control reproduction and transmission. See Rhoads, Abstract.

However, the cited portions of Rhoads simply disclose decoding a watermark and acting upon it. The watermark message may include a pointer to an electronic original document. See Rhoads, paragraphs [0024] and [0043]. Nevertheless, the cited portions of Rhaods are not seen to disclose or suggest compensating for the failure of a search using the pointer, much less searching for an original data file using information input by a user and feature data acquired from an input image in a case that a search using pointer information fails to find the original data file.

The applied art also is not seen to disclose or suggest converting an original data file into outline data and storing the outline data in the database, in a case where the original data file corresponding to the input image is found in a search and the original data file is an image data file.

In that regard, page 4 of the Office Action concedes that Jain does not disclose converting an original data file into outline data which indicates a visual representation of a tracing of the outline of a character of graphic object. Applicant agrees, and submits that it logically follows that Jain also does not disclose or suggest converting an original data file into outline data and storing the outline data in the database, in a case where the original data file corresponding to the input image is found in a search and the original data file is an image data file.

Nevertheless, page 4 of the Office Action asserts that Iwane (Abstract, paragraphs [0173] and [0244]) discloses converting input image data into outline data which indicates a visual representation of a tracing of the outline of a character or a graphic object.

As understood by Applicant, Iwane is directed to an information converting system which registers attribute data including 3-D shape data of parts modeled on various objects. See Iwane, Abstract.

However, the cited portions of Iwane simply disclose that attribute data is stored in association with an identification code, and that outlines in an input image are extracted to generate image information for comparison. See Iwane, paragraphs [0173] and [0244]. The cited portions are not seen to disclose or suggest storing outline data in a database even after a searched-for image is found in a search, much less converting the original data file into outline data and storing the outline data in the database, in a case where the original data file corresponding to the input image is found in a search and the original data file is an image data file.

Loui, Neil and Liu have been reviewed and are not seen to remedy the deficiencies of Jain, Rhoads and Iwane.

Therefore, independent Claims 1 and 16 are believed to be in condition for allowance, and such action is respectfully requested.

The other claims in the application are each dependent from the independent claims and are believed to be allowable over the applied references for at least the same reasons. Because each dependent claim is deemed to define an additional aspect of the claims, however, the individual consideration of each on its own merits is respectfully requested.

No other matters being raised, the entire application is believed to be in condition for allowance, and such action is courteously solicited.

Applicants' undersigned attorney may be reached in our Costa Mesa, California office at (714) 540-8700. All correspondence should continue to be directed to our below-listed address.

Respectfully submitted,

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